#### INTERNATIONAL SEARCH REPORT

Internal Application No PCT/BE2004/000109

# A. CLASSIFICATION OF SUBJECT MATTER IPC 7 F16C17/12 F16C23/04

According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC  $\,7\,$  F16C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

Category •	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 1 181 063 A (NATIONAL RESEARCH	1,2,8,
	DEVELOPMENT CORPORATION)	10-14,
V	11 February 1970 (1970-02-11)	16,18,20
Y	page 2, line 11 - line 106; figures	17,19,21
X	US 3 520 578 A (LICHT LAZAR)	1,2,8,9,
	14 July 1970 (1970-07-14)	13,14, 18,20
	column 1, line 56 - line 58	1
	column 3, line 17 - column 6, line 49; figures	
X	US 4 815 864 A (JONES ALLEN M)	1-3,
~	28 March 1989 (1989-03-28)	14-16.18
	column 1, line 67 - column 4, line 8;	1 20,20
	figures	
	<del></del>	
	-/	

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents:  A' document defining the general state of the art which is not considered to be of particular relevance  E' earlier document but published on or after the international filing date  L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  O' document referring to an oral disclosure, use, exhibition or other means  P' document published prior to the international filing date but later than the priority date claimed	<ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul>
Date of the actual completion of the international search  19 November 2004	Date of mailing of the International search report  02/12/2004
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo ni,  Fax: (+31-70) 340-3016	Authorized officer  Axelsson, T

## INTERNATIONAL SEARCH REPORT

Interna Application No
PCT/BE2004/000109

		PC1/BE2004/000109					
C4(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT  Category Castion of document, with indication, where appropriate, of the relevant passages • Relevant to claim No.							
Catagory •	Custion of document, with indication, where appropriate, of the resovant passages	Heirvant to comm No.					
Y	US 3 504 953 A (LOVE WILLIAM J) 7 April 1970 (1970-04-07) column 1, line 46 - line 61; figures 1,2	17					
Y	US 5 519 274 A (SCHARRER JOSEPH K) 21 May 1996 (1996-05-21) column 3, line 5 - line 54; figures	19					
Y	PATENT ABSTRACTS OF JAPAN vol. 0142, no. 76 (M-0984), 14 June 1990 (1990-06-14) & JP 02 080811 A (NIPPON TELEGR & TELEPH CORP <ntt>), 20 March 1990 (1990-03-20) abstract</ntt>	21					
Α	US 4 251 119 A (SPIES ALFONS) 17 February 1981 (1981-02-17) cited in the application column 2, line 11 - column 4, line 10; figures	1,2,8,9, 11-13,20					
A	US 5 518 320 A (MOHAMED ZAHROOF ET AL) 21 May 1996 (1996-05-21) column 1, line 22 - line 24 column 5, line 52 - line 67; figures 7a,7b	1,2,8, 14,16					
A	FR 1 448 052 A (M. ZELLER) 16 November 1966 (1966-11-16) the whole document	1,2,20					
	-						

## INTERNATIONAL SEARCH REPORT

nation on patent family members

Interns Application No PCT/BE2004/000109

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
GB 1181063	A	11-02-1970	NONE		<u> </u>
US 3520578	A	14-07-1970	NONE	<del></del>	
US 4815864	A	28-03-1989	NONE		
US 3504953	Α	07-04-1970	NONE		
US 5519274	Α	21-05-1996	NONE		
JP 02080811	Α	20-03-1990	NONE		
US 4251119	A .	17-02-1981	DE CH CS DD FR GB JP	2616132 A1 617249 A5 195750 B2 129666 A5 2348394 A1 1581565 A 52124555 A	20-10-1977 14-05-1980 29-02-1980 01-02-1978 10-11-1977 17-12-1980 19-10-1977
US 5518320	Α	21-05-1996	NONE	·	
FR 1448052	Α	16-11-1966	NONE		